A CEOS Land Product Validation topical workshop:

Validation of global vegetation indices and their time series
University of Montana, Missoula. MT
August 7, 2006

This one-day international workshop, preceding the Global Vegetation Monitoring workshop August 8-10th, will bring together both producers and users of global vegetation index time series data to assess the current state of their accuracy and methods used to quantify the uncertainties in seasonal/phenology metrics and long-term land surface process studies.

The workshop will allow researchers to review current validation strategies in the context of multi-sensor analysis to assess data continuity and proper use and interpretation of vegetation indices within both the scientific and application communities.

Proposed Agenda

8:30-9:00 CEOS Land Product Validation and the workshop objectives
- Overview of validation definitions and procedures

9:00-10:40 Presentations on existing validation efforts (20 minutes)
- AVHRR perspectives and experience
- GIMMS data
- Continuity efforts of AVHRR-VGT-MODIS-VIIRS
- Continuity efforts from ground-up
- MODIS experience with multiple VIs and QA layers

10:40-11:00 break

11:00 -12:30 New opportunities for VI validation (30 minutes)
- SpecNet
- Fluxnet
- Phenology networks
  - National Phenology Network –US
  - European Phenology Network
  - Others…

12:30-2:00 Lunch

2:00-3:30 User's perspective: VI sensitivity analysis

(how the data are used, limitations of available data, future opportunities)

Use of VI's in Models (Ecosystem, carbon, climate, etc.)

MODIS and AVHRR VIs

VPM model with SPOT-VGT and MODIS

CASA model / AVHRR and MODIS VI's

AVHRR NDVI studies

AVHRR NDVI and NPP

Agriculture & Rangelands

Biophysical- VI studies through Canopy RT models

3:30-4:00 Break

4:00-5:00 Discussion on VI climate data records (to reach consensus on …)

- Required properties of the satellite data for detection of long-term conditions
- Role of new advanced or enhanced VI, with respect to the long-term NDVI record.
- Appropriate data processing techniques/algorithms for the development of seamless, continuous long-term moderate resolution VI products
- Required accuracies to detect critical phenomena

The outcome will be a well-structured outline for a report detailing the consensus opinion of the workshop participants pertaining to these issues. Individuals will be assigned to lead the various sections and the compilation of the document.